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THE PHONEME : THE TRUE HISTORY OF THE TERM AND THE CONCEPT

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Abstract

The establishment of the phoneme as a term and as a concept was not the merit of one person . An historical tracing revealed that the idea of the phoneme was much older than the term itself. It was found that neither Louis Havet nor Mikolaj* Kruszewski invented the term as was stated by some linguists. A thorough investigation has shown that the French phonetician A. Defriche-Desegnettes coined the term , but only to denote sound . Luis Havet , a Romance philologist , used it in the same sense , while Sassure used it in a historical sense . Kruszewski, a Polish linguist, proposed to employ the term "phoneme" as different from "phone" . Jan Baudouin de Courtenay , on the other hand , gave the phoneme its first definition and he was the first to investigate into its nature . He was aware of its importance and expected concequences for the development of linguistics .

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* This name is pronounced / mikolay / in Polish and /nikolay/ in Russian , cf. P 32 .

I. Introduction.

Nowadays when the word phoneme is mentioned in any linguistic book or by any linguist , we do not quite realize what a revolution took place in linguistics when this basic concept was established as a linguistic unit . It would be no exaggeration to say that the coinage of the term phoneme and the introduction of its concept into the science of language became a turning point in the development of this branch of knowledge. It had a decisive influence not only on the way of dealing with problems of sounds, but also on the whole of linguistic methodology . The discovery of the phoneme can be considered as one of the most magnificent achievements of linguistic science. It is one of the universals of language. There is no human language, as far as I know, which does not have phonemes. It is a basic unit in every language .

The original plan for this paper was to write everything about the term phoneme, its history, definitions and theories. The massive amount of

knowledge that exists in the field of phonemics made it necessary to limit the topic mainly to the history of the discovery and establishment of the term. Another reason for this limitation is the fact that there is a great controversy about everything related to the phoneme, including the definition of that term ! The result was numerous different defintions for the phoneme and many different views of its nature. It has even been said that although the phoneme is a fundamental concept in linguistics, it is undefinable, i.e. no complete satisfactory definition can be achieved (cf. ,for example, Twaddler, 1966 and Swadish, 1978) .

We realize that this is true to a great extent when we read all what was written about the definition of the phoneme . All these different definitions confirm the fact that, as most of linguistic terms, there has been ambiguity in the term phoneme ever since its coinage .

A third reason for the limitation is the fact that the theories of the phoneme are in no better shape.

Since the formulation of the first theory about the phoneme, the problem of that term has been subjected to innumerable considerations. No linguistic school could avoid discussing this basic principle. But although there was widespread disagreement on the theory of phonemes, in practice, linguists of different schools arrived at very much the same results. Even in generative phonology where linguists rejected to state the phonological rules in terms of phonemes at the beginning, the latest development within the generative phonology does no more reject the phoneme as one might expect. For example, S. A . Schane (1971) stated that "the phoneme is a viable phonological unit for capturing relevent surface contrasts" and that "the phoneme must be recognized as a phonological entity" .

II. The Phonemic Intuitions.

The idea of the term phoneme , as distinct from the formulation of its theories, is very ancient. There is a long prehistory for the phonemic principle . This part will be devoted to trace the prehistory of the

phonemic principle.

The first traces of the phonemic principle must date back as early as the times when people started to think about writing down their languages by an alphabetic writing system instead of using a pictorial one (Jones , 1957 : 1) . By what Edward Sapir (1978) called "phonemic intuitions" which people possess, they started to exploit these intuitions as soon as they began attempting to write their own languages alphabetically. They work with this phonemic intuitions as they are phonetically unsophisticated and probably uninfluenced by any alphabetic writing system at the beginning . They only know which differences between speech-sounds are capable of distinguishing words in their own languages, while at the same time they might not notice or ignore other phonetic differences which may exist but do not change the meaning of a word. Accordingly, their early attempts of inventing an alphabetic writing system was , in general, a phonemic one.

A very good example for an early orthographic

system was given by professor Daniel Jones in his article "The History and Meaning of the Term "Phoneme" (1957). There , he mentioned the Korean alphabetic writing system which was devised about the year 1450 A.D. by the Korean King Se-Jong. His writing system is a strong evidence which suggests that he had phonemic intuitions. However, this does not mean that he knew the principle. It means that he worked with this phonemic intuitions to formulate the alphabetic system . For example, he represented the sound [p'] (slightly aspriated p) and [b] by a single letter. He knew that the two sounds were different, but as in korean they occur only in complementary distribution (b occuring to the exclusion of p' between voiced sounds , and p' being used to the exclusion of b in other situations). Accordomg to Jones they have a kind of "sameness" to Koreans. The two sounds belong to a single phoneme and are consequently represented in writing by a single letter.

The earliest known traces of the concept of the phoneme can be found in the Indian linguistic school

(especially in the works of Patanjali, second century B.C., and Bhartrhari, sixth century A.D.). This remarkable school invented and developed the concept of *sphota* meaning the sound form in respect to its semiotic value. According to Sanskrit grammarians, each linguistic level has its own kind of sphota that corresponds to syntactic constructions and whole sentences, another corresponds to combination of morphemes' and to whole words .

By the time of Patanjali, a discrete "letter-sound" (varna-sphota) had been defined as the lowest level of sphota. This concept, strictly distinguished from "speech sound" (dhvani) and from all other kinds of sounds or noises (sabda), corresponds in essence to the modern phoneme (Jacobson,1978 : 25) . The Sanskrit grammarians described varna-sphota as being devoid of meaning, but at the same time endowed with certain significance since replacement of such a unit can produce an entirely different word. The meaning of this different word can be misunderstood if the listener does not recognize the sound change. The

Sanskrit linguists considered the sphota as the constant, invariable subsratum of speech variations. Thus, the speed of an utterence may vary, but this does not interfere with the relation between length and shortness of vowels since that relation in Sanskrit belongs to sphota. In modern terminology we can say that it is a phonemic relationship.

The Sanskrit grammarians were pioneers of the fundamental contemporary problems and discussions on the definition of the phoneme. For a long time Europeans did not develop any similar linguistic theory . Greek philosophy did, however, make a substantial contribution to the development of linguistic thought. Greek linguists consider that language consists of indivisible sound units capable of forming meaningful wholes. Such a unit was called "primary elements" (stoicheia) . Jakobson stated that "Aristotle's poetics defines (stoicheia) as an indivisible sound devoid of its own meaning , forming a part of a syllable, i.e., of a complex sound which in turn is devoid of meaning and serves to form higher units, such as nouns and verbs,

namely complex sounds endowed with meaning and indissociable into meaningful components. It is from these units that sentences (complex sounds endowed with meaning and dividible into meaningful units) are constructed. According to Plato, one cannot understand human speech without discriminating a certain number of discrete stoicheia in the infinitely divisible flow of sound produced by the human voice. At the same time one cannot learn any single one of these stoicheia without having learned all of them. In language, a knowledge of the general correlations that organize the elementary units into a coherent system is necessary . Thus, in Plato's understanding, language imposes upon the infinitely divisible physical continuum of the gross sound matter a coherent system that conatins a limited number of discrete formal units with definite interconnections. Democritus and his follower Lucretius, in searching for an analogy which might confirm the theory of the atomic structure of the physical universe, cited the stoicheia (elementa) as ultimate components of

speech. The term ***stoicheion*** was used to designate both physical and linguistic elemental units" (Jakobson, 1978: 26) .

The interest in the problem of speech sounds continued in medieval theories of language . According to Thomas Aquinas , speech sounds are primarily designed to convey meaning but they have no meaning in themselves; they are a human articraft. Their study should involve the investigation into the way in gross sound matter is processed and made use of for semiotic purposes (Kramsky ,1974 : 12) .

In the Arab world , the interest in speech sounds and their articulation started with the revelation of the Holy Quraan . Two major factors created this interest . The first one was the fact that the verses should be recited exactly as the way the prophet (peace be upon him) used to recite them . This necessitated a careful analysis for the speech sounds and their articulation . Thus, a new branch of knowledge known as the science of TAJWEED (intonation of the Quraan) came to existence . The

second factor was the fact that the verses could be recited according to seven Arabic dialects (cf. Saheeh Al-Bukhari , Vol. 6 , narration no. 1416 , p. 582) . This meant that there were certain sounds which could be pronounced differently without changing the meaning in general (i.e. phonemes which have allophones) .

During the second century anno Hegirae (about the ninth century A.D.) Arab grammarian and scholars clearly wrote about the concept of phonemes and allophones . The leader of such writings was the most famous grammarian Seebawayh. In his great book Al-Kitaab , he clearly discussed such concepts . He said that the number of Arabic " letters" (i.e. phonemes) are twenty nine "original" ones (usuul) . These become thirty five if we count six acceptable subsidiary "letters" (i.e. allophones) (furuu') . They are considered "acceptable" because they can be used when reciting the Holy Quraan, or when saying classical poem . He added that the twenty nine "letters" become forty two if we count an additional thirteen

unacceptable subsidiary "letters" (cf. Al-Kitaab, Vol. 4 , pp. 431 - 432 for more details, see also Al-Najjaar , 1982 for a detailed discussion of the Arab grammarians' contributions to the field of phonetics) .

Another interesting example of the anticipation of the phonological theory in another part of this world can be found in the work of the unknown Icelandic "First Grammarain " of the twelfth century . His work entitled "First Grammatical Treatise" , showed a remarkable originality and independence of thought. He was primarily interested in spelling reform. He tried to improve the use of an alphabet derived from the Latin alphabet for the writing of the Icelandic language of his day .

In his text, the "First Grammarian" pointed to the inadequacies of the existing Icelandic alphabet at his time. He managed to distinguish all thrity-six vowels of the Icelandic of his time by the use of only nine letters and two diacritics which was adequate for the indication of contrastive pronunciation. Many

consonants on the other hand occurrd as long or geminate in contrast with their short counter parts. He used a capital letter to represent long consonants. Thus n represented [n] , and N represented [nn] .

By the beginning of the nineteenth century, the phonemic principle started to assert itself again. In the last third of the eighteenth century and the first third of the nineteenth century an interesting figure appeared in Polish linguistics : general Jozef Mrozinski (1784-1839). In 1822 he published in Warsaw the book Pierwsze Zasady grammatyki jezyka polskiego. According to Kramsky "The book met with a very unfavorable and unjust review by Adrian Krzyzanowski and Andrzej Kucharski. Mrozinski answered with a 300 pages work "Odpowiedez na umieszcona w Gazecie Literackiej recenzyje dziela pod tytulem : Pierwsze Zasady Grammatyki jezyka polskiego " , Warszawa 1824. He accused Polish grammarians of pedantry, of mixing sounds and letters, of an unscientific approach to language and of incapability to analyze the structure of the Polish language .

His two basic thesis read as follows " language rules can be derived only from the mechanism of the language " and " The analysis of sounds and the change of words serves in my book exclusively the elucidation and motivation of the principles of language structure " . Further he wrote " A linguist who observes the structure of language must find out the features that characterize the relations between speech sounds and on the basis of these features he must establish a classification of sounds, as the aim of each subdivision of sounds follows from the mechanism of the language . A classification established without this aim appears to be without the least use " (P. 379). The first task Mrozinski set up for himself was to establish and describe the sounds of Polish . His aim was to find out all possible relationships of speech sounds . It is interesting that he does not speak here about genetic relationship but about " relationship" occuring in the system owing to the system . It is necessary to determine the repertory of word differentiating means in the sound system of the

given language . A good example of treating the sounds from the standpoint of the word differentiating function is Mrozinski's discovery that the distribution of the Polish vowels [i] and [y] depends on the differentiation of immediately preceeding consonants according to their softness and hardness .

Mrozinki's ideas on the principles of language structure were known to Jan Baudouin de Courtenay and very probably also to Mikolaj Habdank Kruszewski , both of whom were also Polish linguists (see below) . Kruszewski's opinion on the possibility of discovering in the very language the fundamentals of a new , immanent science of lanaguage is in agreement with Mrozinski's opinion that it is necessary to infer the language rules solely from the mechanism of the language (Kramsky, 1974 : 14-15) .

In the outline of his first course at Kazan, Baudouin devotes particular attention to the mechanism of sounds , their correspondences and their mutual dynamic relations based on the association of meaning with sounds . He proposes to consider

especially the influence of certain sounds on meaning and , vice versa, the influence of meaning on the quality of sounds . In the totality of the language of a person or a nation he clearly detects the principle of relativity of sound categories , and particularly parallel sets of sounds based on their distinctive physiological properties such as the distinction of sounds as soft and hard , voiced and voiceless, long and short, stressed and unstressed .. etc. . On the basis of such diverse differences languages develop certain parallel sound oppositions which constitute the main subject matter of morphological phonetics, since they are intimately connected with the meaning of words and parts of words (Jakobson , 1978 : 32 - 33).

In Western linguistics , the only Western linguist who undertook systematic research on phonological problems at the same time as the first attempt of the Kazan center was Jost Winteler (1846 - 1929) , a Swiss scholar of the same generation as the two Poles , who in 1878 published in Leipzig a monograph on his native dialect entitled *Die*

Kerenzer Mundart des Kantons Glarus in ihren Grundzugen dargelegt . This book, which was subsequently long forgotten , opened new horizons for dialectological field work and for the phonoetic analysis and classification of speech sounds . It gave the concrete phonological description in world linguistics . The author strictly and consistently distinguished " accidental features " (variants) from " essential properties " (invariants) on the sound level of language . In order to discover and identify these invariants, he applied a device , later called the commutation test, observing whether two sounds could in the the same condition differentiate the meaning of words, e.g. he showed the phonemic character of the two rounded vowels in the contrasting pair /tud/ 'twig' - /stud/ 'pillar' . Shortly after the appearance of the Swiss scholar's book , the phonetician Henry Sweet , then president of the London Philological Society, called it an uncompromising challenge to the old German Philological School (Jakobson , 1978 : 51 - 52) .

Henry Sweet and Jan Baudouin de Courtenay are an excellent examples concerning those who came to the phoneme idea . They came to the idea independantly but almost simultaneously . In his presidential address about Henry Sweet, C. L. Wrenn wrote, in connection with the revised edition of Sweet's "History of English Sounds (1888) " , "Its preface also emphasizes what was already apparent in the 1877 edition - that Sweet may virtually be regarded as a co-equal with Baudouin de Courtenay in discovering the phoneme One cannot be sure whether Sweet or de Courtenay was the first to realize this new and most important conception , since they worked - the one in London and the other in Kazan in South Russia, in entire ignorance of each others studies . But in 1877 , Sweet had clearly recognized , by his distinction of "Broad Romic" symbols to represent in effect functional features or units of speech in English , the idea which is at the base of de Courenay's elaborately reasoned explanation of the phoneme, and 1877 was the year when probably both

scholars definitely reached their findings. Sweet in print only by implication and a purely practical aid, and de Courtenay theoretically and at length, though only in then unpublished lectures .

In his preface of 1888 Sweet writes ' It will be observed that I use the less accurate "Broad Romic" as a kind of algebraic notion, each letter representing a group of similar sounds' (p. X) . . . here I think Sweet clearly distinguishes between the phonemes which are alone are necessary for the writing of the sounds of a language and the phones (the actual sounds) which would be heard in the speech of separate individuals " (Wrenn, 1964 : 189 - 190) . In the same address Wrenn stated (p. 198) that " He was either the discoverer of the concept of the phoneme (though he did not use the term) or an independent discoverer of the idea contemporary with the Polish Jan Baudouin de Courtenay and the Kazan School of Philologists" .

I feel that there is some kind of prejudice and misinterpretation , in the above two quoted statements , against Baudouin de Courtenay . The

prejudice occured in words like " Sweet may *virtually* be regarded as *co-equal* with Baudouin de Courtenay *in discovering* the phoneme", and " 1877 was the year when probably both scholars definitely reached their findings. Sweet *in print* only by implication and as a purely *practical* aid, and de Courtenay *theoretically* and at *length* , *though only in then unpublished lectures* " . How can we consider that Sweet *discovered* the phoneme while he only *recognized* the idea *implicitely* ! ! It could be true that he did not recognize the idea , but it was "recognized" for him as it is the misinterpretations of those who already knew the phoneme which made them consider Sweet as the discoverer of the concept of the phoneme .

A very similar case happened recently with Chomsky when he first published his theory of transformational generative grammar in 1957 . This theory caused a stir in linguistic circles and engendered a lot of controversy. Somehow it was claimed that this theory *implied* a language teaching

methodology . However, " Chomsky himself pointedly denied the claim that his grammatical theory included or specifically implied a language teaching methodology " (Newton, 1979 : 17) .

It would be more accurate to say that Sweet's "Broad Romic" indicated that he had the phonemic intuitions that enabled him to "distinguish between those differences which are distinctive , that is , to which differences of meaning correspond , and those which are not " (Sweet , 1977 : 182) . The second statement of Wrenn in which he said " He was either the discoverer of the concept of the phoneme .... or an independent discoverer of the idea contemporary with the Polish Jan Baudouin de Courtenay " , is completly unacceptable for the above mentioned reason , and because if he says that Sweet discovered the concept of the phoneme implicitly in his "Broad Romic" , then we can say that there are earlier discoverers for that concept such as the Sanskrit grammarian, the Korean King Se-John , the Arab grammarians , the Icelandic First grammarian , Jespersen and all other

phoneticians and orthographists who used broad transcription . The same argument was used against M. Z. Arend (1934 : 2) when he said that "Jan Baudouin de Courtenay ...., was , I believe, the first to formulate the idea of the phoneme " . J . R. Firth (1975 : 2) responded in his article "The Word Phoneme" saying that " as for the 'phoneme idea' , quite simply it must be regarded as implicit in the work of all phoneticians and orthographists who employed broad transcription "

Paul Passy was another phonetician who applied the phonemic principle in phonetic transcription . Danial Jones thinks that Passy came to the basic principle independently , " but he probably clarified his ideas on the sbject in 1880's by studying the works of Sweet for whom he had great respect .... An early reference to the phonemic principles is to be found in the first formal statement of the aims of the International Phontic Association (I . P. A .) which was drafted by Passy and was agreed to by the Council in 1888 . The relevant paragraph ran as follows :

"There should be a seperate letter for each distinctive sound, that is , for each sound , being used instead of another , can change the meaning of the word " (Jones , 1957 : 4 - 5) .

The phoneme idea can also be found in England . Before Daniel Jones and Henry Sweet by more than a hundred years ago Messrs Pitman and Ellis wrote in their 'phonotype' or phonetic writing " no letter represents absolutely the same sounds , except in conjunction with the same letter " (Abercrombie , 1965 : 135) . This means that they anticipated the phonemic principle, and that they had phonemic intuitions .

Finally, traçes of the phoneme concept appeared in the work of Professor O. Jespersen ; an eminent linguist who have devoted much work to the study of English . He has carefully distiguished , in his Lehrbuch der phonetik , between functionally relevent and functionally irrelevent phonic facts . In the last chapter of his Lehrbuch he emphasized the fact that phonic differences negligible in some languages on

account of their functional irrelevence , must be very carefully noted in other languages because they are functionally relevent in them . That is why e.g. a French man will hardly notice the difference in pairs of German words like Aus ~ Haus , Erz ~ Herz , and Eis ~ Heiss (cf. Vachek , 1979) .

To sum up : The above part was a round up survey for the history of the concept of the phoneme and the phonemic intuitions that occured during the pre-history period of the phonemic principle . It is obvious that the idea of the phoneme is undoubtedly older than the term itself . The notion , however, lacked an explicit label until the last third of the nineteenth century when the word "phoneme" was coined and used for the first time (see below) .

It might be as a thing of particular interest , that I have noticed that many of those who , intuitively , came to the basic principle underlying the phoneme , without necessarily talking about it as a concept , were basically interested in the writing system of their languages . For example , the Korean

King Se-Jong invented an alphabitic writing system for his language , the First Grammarian was primarily interested in spelling reforms for the writing system of the Icelandic language of his day . Missrs Pitman and Ellis , on the other hand, wrote their implicit anticipation of the phonemic principle in their work which was entitled "phonotype" or phonetic writing , Henry Sweet and Paul Passy applied the phonemic principle in phonetic transcription, and finally Edward Sapir noticed what he called "phonemic intuitions" in his experience of reducing American Indian Languages to writing .

The coinage and establsihment of the term and the beginning of its utitlization will be discussed in the following part .

III. The History of the Term.

a. The Coinage of the Term .

In his treatise on the history of the term "phoneme" Daniel Jones noted that " Baudouin de Courtenay stated more than once that the word fonema

was the invention of a student of his named Kruszewski" (Jones , 1957 : 3 , footnote 5) . On the other hand , in another work of his , namely , The Phoneme : Its Nature and Use , 'he stated that " According to J . R . Firth , the term "phoneme" was invented (and he should have said 'adopted' or used Firth's word 'employed ' to be more exact) as distnict from "phone" in 1876 by a linguistic scholar named Kruszewski , a pupil of the Polish linguistician Baudouin de Courtenay " , and as a footnote to that statement he noted that " The French word "phoneme" appears to have been invented by L . Havet , who employed it in 1876 to mean "speech-sound " . Many other French writers in linguistic subjects have used it in the same sense " (Jones , 1962 : vii, footnote 4) . In the same book (p. 213 , footnote 7) he noted again that " Baudouin de Courtenay , in his proba teori alternacji fonetycznych (Essay on the theory of phonetic alternations , Cracow, 1893), ascribed the invention of the word "phoneme" to Kruszewski " (Ibid)

When the history of the word "phoneme" was

traced and investigated , it was found that neither Jones nor Baudouin was correct . This is because neither Havet nor Kruszewski was the first to invent or coin the word "phoneme" . Both of them , however, contributed to establish and popularize the word . The earliest treatise in English , that I could find , which mentioned the first coinage of the word phoneme is Jakobson's " The Kazan School of Polish Linguistics and its Place in the Internatinal Development of Phonology" (1978) . According to Jakobson (p. 27) , it was " A. Dufriche-Desgenettes , a modest septuagenary phonetician and cofounder of the Societe de Linguistique de Paris , ... who proposed in the Society meeting of May 24 , 1873 , the use of a one-word equivalent for the German *sprachlaut* instead of the combersome *son de langage* . The label he advocated was *phoneme* , a French adaptation of the Greek /fonema/ "sound" .

Kramsky (1974) have stated the same information mentioned above and cited the same reference which was cited by Jakobson to that

statement (i.e. *Revue Critique* , I . 1873 : 368) . The only difference was that Kramsky wrote the German word as *sprechlaut* instead of Jakobson's *sprachlaut* . An English-German dictionary was consulted to check whose spelling was correct . It was found that Jakobson's has the right spelling for that term which is composed of two words : *sprach* which means "language" , and *laut* which means "sound" . The third person who confirmed the fact that Dufriche-Desgenettes was the first who use the term phoneme was Geoffrey Sampson (1980) . In a footnote to an article by Sassure entitled " Language as a Social Fact " he said "Sassure did not invent the term "phoneme" . It was first used by the French phonetician A. Dufriche -Desgenettes in 1873 " (Sampson , 1980) .

The story of the survival of this term continued when Louis Havet used it . According to Jakobson, " This term actually appeared in Dufriche-Desgenettes' own writings, but it could hardly survive if the suggested vocable had not been endorsed by the

eminent Romance Philologist Louis Havet who used it from 1974 , giving due credit to the promoter . No one would have guessed at that time that this word would later take a prominent place in international terminology and serve as a model for innumerable coinages , such as *stroneme* , *chroneme* , *toneme* , *prosodeme* , *grapheme* , *morpheme* , *syntagmeme* , *grameme* , *lexeme* , *sememe* , *semanteme* , *glosseme* , *cenemateme* , *tagmeme* , *taxeme* , *acteme* , *behavioreme* (cf. in French , *phraseme* , *logeme* , *meleme* , *gusteme* , *delireme*) with compounds like *morphophoneme* , *achiphoneme* , *hyperphoneme* , *hyperbehavioreme* and deravatives -*phonemic* , *phonemics* , *phonemicist* , *phonemicity* , *phonemicize* , *phonemicization* , *tagmemic* , etc. or finally rootless formations : *eme* , *emic* , *emics* , *emicness* . Could Dufriche-Desgenettes have expected that this substitute for Sprach-laut would evolve semantically and even should be , on the eve of World War II , tentatively translated by Xenophobic German purists as Sinnlaut 'significant

sound " (Pike , 1975) .

It should be noted here that in footnote number five to the above quoted statement , Jakobson indicated that Louis Havet employed the term in 1875 in an article entitled "Sur la letre R et ses diverses modifications" , which means that he used the term "phoneme" one year earlier than the date noted by Daniel Jones which was 1876 . Moreover, footnote number two in Havet's article "OI et UI en francais" is a strong evidence that confirms the notion that he "borrowed" the term from Dufriche-Desgenettes and did not "invent" it as Daniel Jones stated . In this footnote Havet stated that "phoneme , term que j'emprunte A. Dufirche-Desgnettes , de la societe du linuistique de Paris , designe un son article quelconque " (Robins, 1968) .

The next step for the term phoneme was when it was taken over , with a notable shift in meaning , by Ferdinand de Sassure In his "Memoire sur le systeme primitif des voyelles dans les langues indoeuropeanes" de Sassure used the term phoneme in a strictly

historical sense . The comparative studies disclosed that in cognate languages morphological units of common origin show regular phonetic correspondences , and that each of these correspondences reflects a common prototype in the parent language . This hypothetical uniform and distinct prototype of later multiform progency was labeled *phoneme* in Sassure's Memoire . This entity was conceived as an element of the phonological system that , irrespectively of its precise articulation , is recognizable as diferent from its other elements (Sampson, 1980) .

The third giant step was a turning point in the development of the term and its concept . It was Mikolaj Habdank Kruszewski (1851-1887) , the closest collaborator of Baudouin de Courtenay , who took up the term from Sassure and used it to denote the concept of the phoneme as distinct from 'phone' . This leads us to

the discovery of the phoneme concept period which will be discussed in the following part .

Once again, it should be noted here that I noticed that Jakobson stated that it was Mikolaj Kruszewski, while Kramsky said that it was Nikolaj Kruszewski who took up the term from Sassure . At first I thought that one of them had made a spelling mistake or that it was a misprint . However , it was found that both of them were correct because this name is pronounced Nikolaij in Russian and Mikolaj in Polish .

In short, through this investigation for the coinage and establsihment of the word phoneme , it was found that A. Dufriche-Desgenettes coined the the word in 1873, but only to mean speech-sound . Louis Havet was the second to use the word to denote the same meaning . Sassure took it over from Havet and employed it in a historical sense . Kruszewski adopted it from Sassure but did not give it a definition , although he was the first who proposed to use it to denote the concept of the phoneme as distinct from "phone" . Kruszewski , however , marked the inception of the Kazan school role in the development of the phoneme concept . The contributions of Kruszewski

and Baudouin de Courtenay will be discussed more thoroughly in the following section .

B . The Discovery of the Phoneme .

The major role in the development of the phoneme concept was played by the Kazan school of Baudouin de Courtenay . This role was explained thoroughly in Jakobson's essay " The Kazan School of Polish Lnguistics and its Place in the International Development of Phonology" (1960) . In this essay , Jakobson stated that in 1881 Kruszewski wrote " I propose to call the phonetic unit (i.e. what is phonetically indivisable) a phoneme , as opposed to the sound - the anthropophonic unit . The benefit and indispensability of such a term (and such a concept) are obvious a priori " (Jakobson , 1978 : 39) . In fact , the real date of this proposal is 1879 and not 1881 as Jakobson stated . According to J. R. Firth , it is in the introduction to the earlier work (Cracow, 1893) that Baudouin de Courtenay gives the early history of the term phoneme ; " he takes it back to an essay published

at Kazan in 1879 on the influence of accent on vowel alternances (guna) in the Rig-Veda , by one of his pupils , Kruszewski (Firth , 1975 : 1) . Jakobson stated the above date because he referred to the German version (Uber die Lautabwechslung) of Kruszewski's Russian essay (1879) which was , according to Firth , published separately in Warsaw in 1881 to make it generally known to other European linguists . Thus, Mikolaj Kruszewski , who took up the term from Sassure , was the first to propose to use the term "phoneme" as distinct from "phone" and accordingly he can be considered the first to establish the phoneme concept .

Moreover, Kruszewski extended the term phoneme to include sound alternances associated with changes of morphological categories . In English , for instance , -s ,-z , -iz would be one morphological phoneme , represented naturally enough by one sign , s . He also extended it to include interlingual correspondences between sounds in related words in parallel morphological categories . And here he came

to the concept of what Professor Jones calls "the diaphone " (Firth , 1975 : 2) .

The first definition for the term phoneme was given ,however , by the Polish linguist and philologist Jan Baudouin de Courtenay . Jones stated that "Baudouin worked out the fundamental principle of the phoneme during the 1870's . He did not write much about it until 1894 when he puplished his propa teori alternacji fonetycznych (Essay on a theory of phonetic alternations) " (Jones , 1957 : 3) .

As the term phoneme was developed by the Kazan school , the story of the ambiguity of that term started during this development . Baudouin himself was aware of the ambiguity of the term phoneme . In his "Nekotorye Otdely" (p.69) he tried to give a common definition covering the diferent applications of the term phoneme . " A phoneme is a unit that is phonetically indivisable from the standpoint of the comparability of phonetic parts of the word " (Kramsky, 1974) .

It might be astonishing , however, to find out

that in Baudouin's later linguistic works the concept of the phoneme loses its original , basic import, and here and there one can find the equation " phonemes , or sounds " which takes us back to the time of Dufriche-Desgenettes ! ! (cf. Jakobson , 1960)

To sum up : the establishment of the phoneme as a term (and as a concept) was not the merit of a single person . Most importantly, A . Defriche-Desgenettes coined the term , but only to denote sound. Kruszewski proposed to employ the term " phoneme " as different from " phone " , and Jan Baudouin de Courtenay gave it its first definition and investigated its nature .

BIBLIOGRAPHY

Abercrombie, D. *Studies in Phonetics and Linguistics*. London : University Press , 1965 .

Al-Bukhari, M. I . *Saheeh Al-Bukhari* , Explained by Shaykh Qaasim Al-Rifaaee , First Edition , Daar Al-Qalam, Beirut, Lebanon, 1987 .

Al-Najjaar, A. M. *Al-Huruuf wa Al-Aswaat* , first edition, Daar Al-Tibaa'ah Al-Muhammadiyyah , Cairo, Egypt, 1982 .

Arend , M . Z . " Baudouin de Courtenay and the Phoneme Idea" *La Maitre Phonetique* , 1934 .

Brough , J . " Theories of General Linguistics in the Sanskrit Grammarians " *Transactions of the Philological Society*, 1951 .

Chomsky , N . & M . Halle , " Some Controversial Questions in Phonological Theory " *Journal of Linguistics* Vol. I , No. 2 , 1965 .

Firth , J . R . "The Word Phoneme " *Papers in Linguistics* . London : Oxford University Press , 1957 .

Havet , L . " OI et UI en Francais " *Romania* , 1874 .

Jakobson , R . " The kazan School of Polish Linguistics and its Place in the International Development of Phonology " *Phonology : Part I : An Anthology of European structuralism* . Ed . Piotr Ruzkiewics , Katowice ,1978.

Jones , D . " Some Thoughts on The Phoneme " *Transactions of the Philological Society* , 1944 .

Jones , D . " The History and the Meaning of the Term Phoneme " *La Maitre Phonetique* . 1957 .

Jones , D . *The phoneme : Its Nature and Use* . 1962 .

Kortlandt , F . H . *Modelling the Phoneme : New Trends in East European Phonemic Theory* . The Hague , Mouton, 1972 .

Kramsky , J . *The Phoneme : Introduction to the history and theories of a concept* . Munchen : Wilhilm Fink Verlag , 1974 .

Newton , A . " Current Trends in Language Teaching " *Teaching English as a Second Language* . 1979 .

Pike , K . L . *Phonemics : A technique for Reducing Languages to Writing* . The University of Michigan Press , 1975 .

Robins , R. H . *A short History of Linguistics* .

Blomington : Indiana University Press , 1968 .

Sampson , G. *Schools of Linguistics* , London : Hutchinson & Co. Ltd. 1980 .

Sapir , E ." The Psychological Reality of the Phonemes " *Phonological Theory : Evolution and Current Practice* Valerie B. Makkai Bluff , Illinois : Jupiter Press , 1978 .

Sassure , F . " Language as a Social Fact " *Schools of Linguistics* , 1980 .

Schane , S . A . " The Phoneme Revisited " *Language* 47 , 3 , 1971 .

Schane , S . A . *Generative Phonology* , New Jersy : Printice Hall Inc. , 1973 .

Seebawayh, A. O. *Al-Kitaab* . Explained by Abdul Salaam Muhammad Haruun. Vol. 4 , 3d Edition, Aalam Al-Kutub, Lebanon 1983 .

Swadish . M . " Twaddel on Defining the Phoneme " *Phonological Theory : Evolution and Current Practice* . 1978 .

Sweet , H . *The practical Study of Languages* . London : Oxford University Press . 1964 (First published 1888).

Sweet , H . *Handbook of Phonetics* . Oxford , 1977 .

Trubetzkoy , N . S . *Principles of Phonology* Berkely and Los Angeles : University of California Press , 1969 .

Twaddel , W . F. " On Defining the Phoneme " *Reading in Linguistics* . Ed. Martin Joos . Fourth Edition , Chicago : The University of Chicago Press , 1966.

Ulaszyn , H. " Sound , Phonema , Morphophonema " *Phonological Theory and Current Practice* . 1978 .

Vacheck , J . " Professor Daniel Jones and the Phoneme" *Phonological Theory : Evolution and current Practice* . 1978 .

Vacheck , J . " What is Phonology ? " *English Studies* Vol. 15 , 1979 .

Wrenn , C . L . " Henry Sweet " *Transactions of the Philological Society* 1946 .

الفونيم : التاريخ الحقيقي للمفهوم والمصطلح

ملخص البحث

لم يكن تقنين الفونيم (وهو أصغر وحدة صوتية كلامية عن طريقها يمكن التفريق بين المعاني في لغة أو لهجة ما مثل الهاء والدال في هبَ ودَب) نتاج مجهود فردي ، فقد تبين بالبحث التاريخي عن جذور هذا المصطلح أن فكرة الفونيم أقدم بكثير من المصطلح نفسه ، كما وجد أن كلمة فونيم بالمفهوم الحالي لم تكن من اختراع لويس هافيت أو ميكولاي كروزيوسكي كما ادعى بعض اللغويين ، فقد كشف التحري الدقيق عن هذه الكلمة أن عالم الأصوات الفرنسي أ . ديفريش ديزيجنيت هو الذي اخترعها ولكن للدلالة على الصوت اللغوي فقط ، ثم استعملها لويس هافيت (عالم في فقه اللغات الرومانسية : الناشئة عن اللاتينية) للدلالة على نفس الشئ ، أما فيرديناند دو ساسيور (عالم لغوي فرنسي شهير فقد استخدم الكلمة بمفهوم لغوي تاريخي ، ثم جاءت النقلة التاريخية الكبرى عندما استعمل جان بودوين دو كورتينيه (عالم لغوي بولندي) هذه الكلمة للدلالة على المفهوم الحالي للمصطلح ، كما كان أول من عرّف المصطلح لغويا ، وأول من بحث وناقش طبيعة هذا المصطلح ، ذلك لأنه كان على دراية بأهمية وما سينشأ عنه لتطوير علم اللغويات .